DOCUMENT RESUME

ED 293 432 HE 021 345

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TITLE A Longitudinal Study of "Guided Studies" Students. AIR 1987 Annual Forum Paper.
PUB DATE May 87
NOTE 22p.; Paper presented at the Annual Forum of the Association of Institutional Research (27th, Kansas City, MO, May 3-6, 1987).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Academic Achievement; *Academic Persistence; College Preparation; Community Colleges; *Developmental Studies Programs; Grade Point Average; Higher Education; *High Risk Students; Institutional Research; Longitudinal Studies; Program Evaluation; *Two Year College Students
IDENTIFIERS *AIR Forum

ABSTRACT

The "Guided Studies" program at a comprehensive community college was evaluated. The program was designed to restrict student course enrollment until academic deficiencies could be erased through successful completion of courses in developmental education. The persistence rates and academic performance of students placed in the program were compared with those of students entering prior to the adoption of the program but with the same academic deficiencies. Student records were analyzed for 743 first-time students in fall 1983 and 563 first-time fall 1984 students. These students were tracked for 2 years, and a follow-up survey was conducted for the fall 1984 group during the 1986-1987 academic year. Results indicate that the "Guided Studies" program improved student persistence. Academic performance, as measured by grade point average (GPA), was about the same for the two groups even after controlling for persistence. The results are analyzed by part-time and full-time credit load, major type, employment status, and cumulative GPA. 9 references. (Author/SW)

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A LONGITUDINAL STUDY OF "GUIDED STUDIES" STUDENTS

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Acknowledgement: The efforts of Saundra M. Japely in the design and Shannon Harris in the implementation of the student survey portion of this study are greatly appreciated.

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HE 021 345

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This paper was presented at the Twenty-Seventh Annual Forum of the Association for Institutional Research held at the Vista International Hotel, Kansas City, Missouri, May 3-6, 1987. This paper was reviewed by the AIR Forum Publications Committee and was judged to be of high quality and of interest to others concerned with the research of higher education. It has therefore been selected to be included in the ERIC Collection of Forum Papers.

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A LONGITUDINAL STUDY OF "GUIDED STUDIES" STUDENTS

ABSTRACT

How are institutions expected to respond to very real student academic needs while at the same time tightening entrance criteria? This paper reports on one institution's response to the dilemma: implementing a "Guided Studies" program designed to restrict student course enrollment until academic deficiencies have been erased through successful completion of courses in developmental education. The research reports on a pre- and post-evaluation of the Guided Studies program. The persistence rates and academic performance of students placed in the program are compared with those of students entering prior to the adoption of the program but with the same academic deficiencies. The results indicate that the Guided Studies program has improved student persistence. Academic performance, as measured by GPA, is about the same for the two groups even after controlling for persistence.

A LONGITUDINAL STUDY OF "GUIDED STUDIES" STUDENTS

INTRODUCTION

Several recent national studies have suggested institutions of higher education need to strengthen their curriculum and raise standards. Spurred by these national studies, institutions of higher education have raised standards with little evidence that entering or returning students can match these standards. Students poorly prepared for college are increasingly at risk of becoming part of the "neglected majority" (Parnell, 1985). How are institutions expected to respond to very real student academic needs while at the same time tightening entrance criteria? This paper reports on one institution's response to the dilemma: implementing a "Guided Studies" program designed to restrict student course enrollment until academic deficiencies have been erased through successful completion of courses in developmental education.

The research reports on a pre- and post-evaluation of the Guided Studies program. The persistence rates and academic performance of students placed in the program are compared with those of students entering prior to the adoption of the program but with the same academic deficiencies. The results of a follow-up survey of the first group of students to be placed in Guided Studies are also described.

The results indicate that the Guided Studies program has improved student persistence. Academic performance, as measured by GPA, is about the same for the two groups even after controlling for

persistence. Detailed analysis of the Guided Studies students indicates that most are successfully completing remedial courses and express satisfaction with the program.

PURPOSE AND BACKGROUND

The aim of this study is threefold. First, the research attempts to evaluate the success of an institution's response to the needs of academically deficient students. That is, does the Guided Studies program produce desired results in terms of student persistence and performance. Second, the study builds on previous research focusing on student persistence and performance patterns in general and underprepared students in particular. Third, the study ascertains student outcomes and attitudes in light of institutional efforts to intervene and direct student choice.

The institution under study is a comprehensive community college located within a large metropolitan region but serving a primarily suburban area. Most of the students are white and from middle class backgrounds. The college enrolls over 20,000 students a year generating over 5,000 FTE. Most students attend on a part-time basis. This study is more representative of the full-time student population, since placement testing and the Guided Studies program is primarily limited to full-time students.

Approximately sixty percent of all entering students tested fall below the institutional set standards for reading, writing and/or

mathematics. The Comparative Guidance and Placement Program (CGP) is used with the reading cutoff below 41, sentence below 45, and math (test C) below 120 and math (test D) below 90. Beginning in Fall 1984, students scoring below these cutoffs were placed in Guided Studies, which restricts their enrollment to only developmental education and other courses that the faculty have indicated are appropriate for students with these academic deficiencies. Successful completion of prescribed remedial courses allows the student to be placed in regular status (this process is monitored by the computer-based, on-line registration system).

Although testing and placement occurred prior to Fall 1984, there was no formal effort made to restrict student course enrollment choices. In fact, concurrent enrollment in remedial courses and college level courses which presumed prior remediation was common. Another change which occurred in Fall 1984 was the adoption of formal entry and exit requirements within the developmental education program. Although Guided Studies is not mandatory, the vast majority of students are cooperative. Students do face the prospect of suspension under the institution's standards of academic progress.

Due to the nature of the institution and type of students attracted, this study falls within the relatively recent research on non-traditional students (Bean and Metzner, 1985; Broughton, 1986; Voorhees, 1986). Of particular concern is the evaluation of student behavior in light of student intent, since students may achieve their personal goals without completion of institutionally ascribed goals (Sheldon, 1981; Walleri and Japely, 1986; Broughton, 1986).

As part of the general reform movement within higher education, a growing number of community colleges have been modifying the "open door" philosophy, upon which they were founded, in an effort to reduce "revolving door" traffic. These efforts have focused on student competencies upon entry and the effectiveness of remedial programs in preparing students for college level work. Roueche, Baker, and Roueche (1987) and Japely, Kennedy, and Walleri (1987) describe overall student success strategies based at specific community colleges and encompassing remedial/developmental education. Bers (1985) reports on a cooperative effort among community colleges in Illinois to evaluate developmental education programs. Results of the research attempting to evaluate reform efforts have, however, been less than definitive. A common problem has been defining an appropriate control group. As one possible strategy, the research reported here uses a pre- and post-test comparison.

DATA SOURCES

Student records contain information on previous student educational achievement, placement test results, current employment status, educational/vocational objectives, standard demographic characteristics, and academic performance. In addition, all fall 1984 Guided Studies students were surveyed in early 1987 to assess their evaluation of the Guided Studies process, counseling and advising, and developmental education courses. The survey also requests information on students' current activities and how the Guided Studies experience assisted or hindered achievement of their educational and personal

goals.

METHODOLOGY

This study is based on an analysis of student records for 743 first-time students in Fall 1983 who would have been in Guided Studies had the program been in operation, and 563 first-time Fall 1984 students who were the first to be placed in the Guided Studies program. Both groups are tracked for two years. In addition, a follow-up survey was conducted for the Fall 1984 group during the 1986-87 academic year. Crosstabulations and T-TEST are the primary choices for statistical analysis. That is, is there a statistically significant difference in the mean number of terms attended or GPA between the two groups?

RESULTS

In terms of demographics, the two groups are similar and, in most cases, similar to the total student population. Average age is 26 with a slight majority of the students female. Almost 90 percent have completed high school or the GED, with about 5 percent without a high school diploma. Although first-time to this institution, another 5 percent have had prior college experience.

Based on their CGP test results, almost 30 percent of the students were deficient in reading, over 40 percent in writing, and over 80 percent in mathematics. More than 35 percent of the Fall 1984 students were

deficient in two or more areas.

Within both groups, the students are about evenly divided between vocational and four-year transfer majors, with about 5 percent other (continuing education, adult high school/GED, etc). The total student population has a much higher and growing percentage of continuing education and occupational upgrading students.

Student intentions and other characteristics are collected on a routine basis as part of the student registration system. In terms of educational goals, a slight majority indicate the two-year associate degree, with the second largest group seeking a four-year degree. Likewise, most of the students attend for job-related reasons with almost a quarter enrolling to explore career direction. Almost 60 percent of the students were employed during their first term of attendance (Fall 1983 or 1984), with about 15 percent employed full-time. Again, and in terms of these characteristics, the students in the two sample groups are not representative of the total student population, which includes a higher percentage of full-time employed, personal enrichment students.

Pre- and Post-Persistence Results

Table 1 describes one- and two-year continuous attendance (quarter system) rates for the academic deficient non-Guided Studies (Fall 1983) and Guided Studies students (Fall 1984). The results are broken down by part- versus full-time credit load, major type, employment status, and cumulative GPA. Although the Fall 1983 students had higher

retention over one year, they also had lower retention over two years. Whereas 23 percent of the Fall 1983 students persisted for one year, only 14 percent of the Fall 1984 students attended three consecutive quarters. On the other hand, only 18 percent of the Fall 1983 students persisted over two years compared to over 25 percent of the Fall 1984 students. The lower one-year persistence rate of the Fall 1984 students may reflect an initial negative reaction to the restrictions of the Guided Studies program. On the other hand, the lower persistence rate of the Fall 1983 group may indicate that their academic deficiencies eventually caught up with them.

The most significant difference between the two groups is the persistence rate of the full-time Fall 1984 students (over 48 percent compared to 30 percent for the Fall 1983 students). Since the Guided Studies program was primarily designed for the full-time student, this is strong evidence that the program is having its intended effect. Retention of part-time students is problematic since many tend to "stop-out" based on employment and family responsibilities.

Vocational students tend to have higher persistence rates because their goals are more immediate and their community college education is often viewed as an end product. Students with a four-year degree goal can opt to transfer at any point in their community college education and few actually obtain the associate degree. The "other" category is composed of a relatively small sample.

Full-time employment is negatively associated with retention for both groups. The non-employed and part-time employed students had higher

persistence rates, and the Fall 1984 group had higher persistence than the Fall 1983 group.

The Guided Studies program has had a major impact on the retention of students with a 2.00 to 2.49 cumulative GPA. Within this category, the Fall 1984 group had a two-year persistence rate of 41 percent compared to less than 19 percent for the Fall 1983 group. That is, the Guided Studies program has been most effective for the less capable and undermotivated student.

Based on T-TEST results for overall quarters of continuous attendance, the higher retention rate of the treatment group is statistically significant (.01). The Fall 1984 group averaged about one-quarter more than the Fall 1983 group.

Table 1. Pre- and Post-Guided Studies Persistence Rates
One and Two-Year Continuous Attendance

	Academically Deficient Non-Guided Studies Students First Term Fall 1983 (N=743)		Academically Deficient Guided Studies Students First Term Fall 1984 (N=563)	
	(Percentages)			
	FA83->SP84	FA83->SP85	FA84->SP85	FA84->SP86
TOTAL	23.1	18.3	14.0	25.6
CREDIT LOAD				
FULL-TIME	32.1	29.9	20.0	48.5
PART-TIME	26.1	19.7	12.2	18.7
MAJOR				
VOCATIONAL	25.1	21.3	16.1	35.9
TRANSFER	23.7	17.3	15.3	24.7
OTHER	13.8	12.5	19.0	4.8
EMPLOYMENT				
FULL-TIME	10.5	14.0	6.5	16.1
PART-TIME	25.9	16.2	15.1	28.4
NONE	24.5	21.2	19.5	33.3
GPA				
1.49 OR LESS	23.3	3.9	19.8	7.4
1.50-1.99	33.7	14.0	12.7	19.7
2.00-2.49	32.3	18.5	17.4	40.9
2.50-2.99	30.4	41.7	12.8	48.7
3.00-3.49	24.0	34.4	25.9	37.9
3.50-4.00	23.7	36.8	21.6	40.5

Pre- and Post-Academic Performance

The distribution of the two groups by cumulative GPA is described in Table 2. The sample size is reduced for both groups due to students who enrolled in pass/fail courses exclusively and/or withdrew. The results are similar for both groups, even when controlled for persistence. That is, even though the Fall 1984 group had a higher persistence rate, their academic performance, as measured by GPA, is similar to the Fall 1983 group. Several interpretations can be offered for the difference in findings between persistence and academic performance. It should be noted that relatively few community college students obtain an associate degree. Students leave for numerous reasons including personal and financial problems, change in job schedule, poor academic performance, and because they have achieved their own personal goal. For students in the latter category, the Guided Studies program, because it restricts their enrollment options, may have simply extended their stay without any noticeable impact on academic performance. There is a less cynical interpretation, however. The Guided Studies program provides a high level of support in terms of counseling, developmental education, faculty advising, and simply that the institution's staff have taken a greater interest in the student's welfare. This support plus improved placement and the prevention of students enrolling in courses for which they are not prepared, may act as a stimulus which improves student motivation. As will be discussed below, most of the Fall 1984 students were successful in their remedial courses. This success also may have increased the student's self-esteem and motivation. This improvement in motivation may have resulted in greater perseverance if not actual performance.

Table 2. Pre- and Post-Guided Studies Academic Performance
Cumulative GPA

GPA	Academically Deficient Non-Guided Studies Students First Term Fall 1983 (N=568)	Academically Deficient Guided Studies Students First Term Fall 1984 (N=440)
	(Percentages)	
1.49 and less	18.1	18.4
1.50-1.99	15.1	16.1
2.00-2.49	22.9	26.1
2.50-2.99	20.2	17.7
3.00-3.49	16.9	13.2
3.50-4.00	6.7	8.4

For the Fall 1984 students, the relationship between type of academic deficiency and overall academic performance was also examined. Deficiencies in mathematics account for most of the students that were in the Guided Studies program, and this deficiency has a relatively long-term impact. Of the students who had a less than 2.00 cumulative GPA, 73 percent were deficient in mathematics upon entry. Of the students with a 2.00 or better GPA, only 57 percent were deficient in mathematics.

The Guided Studies Experience

Additional analysis of the Fall 1984 Guided Studies students was made with regard to their performance in developmental education courses. Further, these students were surveyed some two years after first enrollment. The survey instrument asked the students to evaluate their experience in Guided Studies and the college in general, to provide additional background, and to assess their own educational and personal accomplishments. The survey was conducted by mail and telephone with about a quarter of the original 756 students responding. Most non-respondents simply could not be located. About a quarter of the respondents were still attending the college, but only a handful were still in Guided Studies.

Most of the students who enrolled in developmental education courses were successful in completing their remediation (grades of A, B, C, or S, with the latter passing for pass/fail courses). Of those who enrolled in reading (i.e., RD 10), 52 percent passed, 62 percent in writing, and 60 percent in mathematics. Most students also completed

their remediation in one term, although as many as 40 percent required two or more terms. Reading required more terms than writing or mathematics.

In terms of their current status in 1987 and as revealed in the follow-up survey, 45 percent were still attending college, either at this institution or another college. Almost half were full-time employed with another quarter employed part-time. Approximately 17 percent were unemployed (excludes those not in the labor force), which is about 10 percentage points higher than the overall regional unemployment rate. Of those employed or attending college, about half were working or continuing studies related to the field of study while at this college.

Since the college in question does not collect data on students high school background, several questions were included on this subject in the survey. A full 38 percent of the respondents rated their high school preparation as "below average" or "very inadequate." Another 33 percent rated their high school preparation as "average," with 29 percent "excellent" or "good." Almost 60 percent of the students reported a high school GPA of less than 3.00. These findings parallel a recent statewide longitudinal survey of high school graduates (ten year follow-up) which revealed a relatively high level of dissatisfaction with high school preparation (Oregon Educational Coordinating Commission, 1987).

Student ratings of the college's Guided Studies program, including orientation, testing and placement, and counseling revealed a high

level of student satisfaction. Typically, 80 percent or more of the students rated these services as "satisfactory" or "very satisfactory." Even though Fall 1984 marked the first year of the program, only 30 percent of the students indicated that explanation of the Guided Studies program was "very" or "somewhat confusing."

With regard to actual placement, 90 percent or more of the students agreed with their placement in reading, writing, and mathematics. Similarly, the vast majority of the students were satisfied with the instruction received in developmental education courses. Somewhat contradictory to these findings, almost a quarter of the students indicated that they were placed in courses below their level of ability. Only 10 percent indicated that they were placed in courses above their level.

The more course specific the survey questions became, the more contradictory the results. Only a slight majority agreed with the statement that "instructors matched lessons to their ability." Although only 20 percent indicated that the coverage of course material did not move fast enough, 40 percent indicated just the opposite. These somewhat contradictory findings probably are a reflection of student ratings of multiple courses. Most negative ratings were limited to one specific course.

The restrictive nature of the Guided Studies program was evident from the survey results. Only 20 percent of the students indicated that they were able to enroll in the courses they desired. This is somewhat justified, however, in light of the fact that almost 75 percent of

students indicated that they did not successfully complete all the courses for which they enrolled.

Finally, 47 percent of the respondents indicated that they had achieved their academic goal set at this institution. Less than 40 percent indicated that they had achieved their personal goal. Of those who did not achieve their goals, family and work responsibilities were cited as the most frequent reasons.

IMPLICATIONS

The evaluative component of this research should assist this particular institution, and perhaps others, in modifying and refining intervention strategies for underprepared students. The long-term benefits for both the institution and students must be stressed since such a program can result in a short-term increase in attrition. Another key question is should the Guided Studies program be expanded to include part-time credit students. The results reported here indicate that marginal students benefit the most from such a program, and many part-time students would fall into this category.

Both the Guided Studies program and the associated research should enhance the institution's accountability. The outcomes segment is especially critical given the renewed emphasis within higher education on standards and demonstrated student achievement.

Finally, the research findings will hopefully confirm and/or raise

additional issues about the persistence and academic performance of non-traditional students. Although the results are fairly definitive with regard to persistence, additional analysis of academic performance is indicated.

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